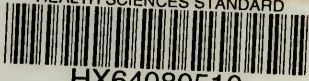


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CANDY MEDICATION

CANDY MEDICATION

BY

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PREFACE.

CANDY MEDICATION has given such delightful results in practice among children that the author believes it should be more widely known and used. A formulary to serve as the common meeting ground for the prescribing physician and the dispensing pharmacist seems absolutely necessary to make this form of medication more generally available; and it is mainly to supply this formulary that this little book has been published.

Researches conducted by the author in the Pharmacologic Laboratory of the University of Illinois during the past five years, as well as the experience gained by the use of this form of medication in private practice, form the basis of this publication.

To give the best results, the sweet tablets described in this formulary should be freshly prepared on physician's order; thereby securing efficiency and palatability to the highest degree, and enabling the physician to prescribe the dose and combination needed for the particular case in hand. To bring these tablets into the category of extemporaneous preparations, the author has elaborated the process of "fat covering" which makes the preparation of these tablets no more difficult than the making of pills or of suppositories.

In the pages that precede the formulary, an attempt has been made to present the principles that have been used in the elaboration of the

formulae, so that formulae for other medicaments suitable to this form of administration may be developed.

Concise directions on the care and use of the tablet machine have been included, to enable any pharmacist equipped with an inexpensive tablet machine to prepare these tablets without difficulty.

The author is keenly aware of the fact that there are probably still some imperfections in the formulae given herein; though he has spared neither time nor labor in making them as perfect as possible. Therefore, comments and criticisms, as well as suggestions, are most welcome, and will receive careful consideration.

It is the author's hope that this booklet may be instrumental in robbing childhood of one of its terrors, namely, nasty medicine; that it may lessen the difficulties experienced by nurse and mother in giving medicament to the sick child; and help to make the doctor more popular with the little ones.

BERNARD FANTUS, M.D.

Chicago, March, 1915.

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CANDY MEDICATION

CHAPTER I.

HISTORICAL INTRODUCTION.

THE IDEA of presenting medicine in candy form is really very old. The term confection, which originally meant a medicinal compound being derived from the the Latin word "*conficere*," to put together, has been applied since the days of classical antiquity to mixtures of medicinal substances with saccharine matter. The only official relics of this once very extensive class of preparations are the confection of rose and the confection of senna; both of which, however, are also practically obsolete. The reason for this is not difficult to find. Neither of them come up to our modern ideas of a confection. We may officially call them a confection, but a youngster would be disrespectful enough to disagree with the pharmacopoeia.

More closely akin to candy are lozenges, and yet they are not real candy. The only one among them that is pleasant is the santonin lozenge; and it is the only one that is popular. An especially good imitation of candy form are the deservedly popular so-called German worm lozenges. It was acquaintance with these that led the writer to seek for other real candy medicaments. He could find only two such upon the market: viz., Calomel Tablets under the name of "Aromatic Calomel," and Phenolphthalein Tablets under various fanciful trade-

names, such as "Purgen," Phenolax," etc., unless "Candy Cathartic Cascarets," and the French candy laxative known as "Tamar Indien" were also to be included.

Convinced that administration in candy form would be ideal for children, the author took a number of years ago a course of instruction with a candy-maker, in the hope of finding in the confectioner's art some new form of pleasant administration for medicine. He made sulphur taffy and cod-liver oil chocolate creams;¹ but these and a large number of other attempts were unsuccessful. It may be of interest, in this connection, to note that, in 1911, Sir James Sawyer² published in "The Lancet" a process for the production of what he calls "cremulae" or medicated chocolate creams. They were prepared by evaporating a mixture of sugar and of milk to the consistency of paste, in which various medicaments might be incorporated, and which is then covered with chocolate, as in the popular chocolate drop. This is, as will be seen, a troublesome process. The author's studies in the candy shop seemed to point to "fondant" as the most suitable candy form for purposes of medication. "Fondant", however, has the disadvantage of becoming hard with age. Free from this objection and closely similar to the "fondant" is a rather lightly compressed tablet made of finely powdered cane sugar. And so finally the tablet form was chosen as the best and most convenient for candy medication—a form which was already

in successful use, as has been stated, for the administration of calomel and of phenolphthalein. For such tablets the term *tabellae dulces*,³ or sweet tablets, might be proposed.

CHAPTER II.

TABELLAE DULCES.

TO BE SUCCESSFUL, sweet tablets must meet the following requirements:

1. They must be perfectly delicious sweets, attractive in form, color, and odor; and free from the slightest suspicion of disagreeable or medicinal taste.

2. They must disintegrate rapidly in the mouth; for a sick child will usually not suck candy as a healthy youngster would.

3. To constitute a real advance in therapeutics, it must be possible for the average pharmacist to prepare them extemporaneously, so that the physician may be able to fit the medicament to suit the case, and that the pharmacist may not be forced to carry in stock a large assortment of these more or less perishable goods.

In view of these exacting requirements, it may seem remarkable that over fifty different medicaments are at present available for administration in the form of sweet tablets. This has been accomplished by taking advantage of the fact that some medicines are practically tasteless; that modern synthetic chemistry has enriched our resources in this direction by the production of a large number of tasteless, or almost tasteless, and yet active substances; and that many of the isolated active principles of drugs are easily disguised. In some cases a chemical trick is successful, e. g., using a little alkali or a little acid to render the substance

less soluble in the mouth. Some of the bitterest alkaloids, e.g., strychnine, have been rendered available for candy medication by the use of finely powdered fuller's earth, or of Lloyd's Reagent, to be described later. Quite a number of almost insoluble substances of slight but lingering taste can be made perfectly pleasant by saccharinization.

CHAPTER III.

THE USES OF SWEET TABLETS.

IT MAY seem strange that modern pharmacy which boasts of so many elegant and palatable preparations suitable for adults, has thus far done so little to render medicine more acceptable to children; and yet attractiveness and palatability are even more important for the little ones than for the grown-ups. Syrups have hitherto been our chief aids in making medicines more pleasant for children. Unfortunately, however, many a child has had its palate offended by liquid medicines to such a degree that it abhors spoon-medicine of any kind, and will struggle even against the most palatable. When one witnesses the struggling of the average child against the average medicine, one cannot but wonder whether at times the struggle does not do more harm than the medicine can do good, and wish that we had other means of administering medicines to the little ones. As all children love candy, this would seem the form most desirable for them. For one who has not used candy medication there is a revelation in store in the positive enjoyment and eagerness with which children take these sweet tablets. And many a petted child that has grown up into a sensitive woman, who believes she cannot swallow a pill, also cannot and will not take medicine. It so happens that just these are often excessively fond of candy and will take candy medicine. Another use for candy medi-

cation is in the treatment of the insane, who frequently will not take medicine, but may take it in candy form.

It may be of interest to see how many indications may be met, confining oneself entirely to the list of candy medicaments:

1. For effect upon the alimentary tract:

Absorbent:

Charcoal.

Antacid:

Chalk.

Magnesia.

Sodium Bicarbonate.

Emetics:

Apomorphine.

Tartar Emetic.

Emetine.

Antiemetics:

Cocaine.

Anaesthesine.

Morphine.

Bismuth Subnitrate or subcarbonate.

Chalk.

Cerium Oxalate.

Antidiarrheal:

Bismuth Subnitrate or Subcarbonate.

Tannalbin.

Morphine.

Chalk.

Cathartics:

Calomel.
Mercury with Chalk.
Phenolphthalein.
Elaterin.
Resin of Podophyllum.
Resin of Jalap.
Senna.
Sulphur.

Antispasmodic:

Atropine.

Intestinal Antiseptic:

Magnesium salicylate.
Mercurials.
Lactic acid ferment.

Anthelmintic:

Santonin.

2. For effect upon the respiratory system:

Expectorants:

Apomorphine.
Emetine.
Terpin hydrate.
Sajodin.

Antitussic:

Heroine.
Morphine.
Sabromin.

Antispasmodic:

Atropine.

3. For effect upon the circulatory system:

Circulatory Stimulants:

Digitalis.

Strophanthin.

Atropine.

Strychnine.

Caffeine.

Circulatory Depressant:

Aconitine.

Vaso-Dilator:

Nitroglycerin.

4. For effect upon genito-urinary system:

Diuretic:

Diuretin.

Caffeine.

Urinary Antiseptic:

Hexamethylenamine.

5. For effect upon skin:

Diaphoretic:

Pilocarpine.

Dover's Powder.

Anhydrotic:

Atropine.

6. For effect upon nervous system:

Depressants:

Morphine.

Hyoscine.

Sabromin.

Sulphonmethane.

Adalin.

Stimulants:

Atropine.

Cocaine.

Strychnine.

Caffeine.

7. Antipyretics:

Acetphenetidin.

Antipyrin.

Acetylamidosalol (Salophen).

Aconitine.

Aristochin.

8. Hematinics:

Iron,

Reduced Iron,

Iron carbonate, saccharated.

Arsenic.

9. Tonics:

Iron, quinine, strychnine.

10. Specifics:

In Malaria:

Aristochin.

Saloquinine.

Arsenic.

In Syphilis:

Mercurials.

Sajodin.

In Rheumatic Fever:

Acetylsalicylic acid (Aspirin).

Acetylamidosalol (Salophen).

Magnesium salicylate.

In Myxedema:

Thyroid.

Of course, a large variety of combinations of these could be elaborated.

It, therefore, seems established that we have, in candy medication, a method of fairly extensive applicability; an almost complete therapeutic armamentarium of the greatest possible value in the treatment of children. For the tiny infant this method is, of course, unsuitable as well as unnecessary. As soon, however, as the youngster commences to know what candy is, it is ready for candy medication. It is particularly during the ages of from three to ten that this form of administration is indicated.

Several objections have been raised against this method. Perhaps the most serious one lies in the danger of poisoning, from the fact that children enjoy these tablets so much that they are likely to eat a large number of them at one time, should the mother be careless enough to leave them within reach. The only way to prevent such an occurrence is not to prescribe more tablets than would constitute a safe dose should all of them be taken at one time. It is better to have the patient get a new supply daily than to have a single case of death or serious disturbance occur from this source.

Another objection that has been raised is that the dose of some of the medicines is very small. In the case of such remedies as sulphur and chalk the author admits that the dose is perhaps too small to be of practical importance. In the case of most other medicaments, however, the smallness

of dose is of advantage rather than of disadvantage, in that it necessitates administration at short intervals. If the administration of small doses frequently repeated until the desired effect is obtained is a good principle in practice, it is particularly so in pediatrics. For are not all the vital processes of the child much more rapid than those of the adult; are not its bowel movements, its urinations more frequent, does it not need nourishment more often? Then why not medicine?

CHAPTER IV.

THE MAKING OF SWEET TABLETS.

IT IS GENERALLY supposed that tablet making is an art, requiring special expertness and expensive machinery. Now while both of these ideas are correct when the preparation of a large variety of tablets and of large quantities is contemplated, they are erroneous in regard to the making of prescription quantities of these sweet tablets, which present a comparatively simple and relatively uniform problem in tablet making.

Though the process of making moulded tablets was introduced by Dr. Robert M. Fuller of New York before the Academy of Medicine on February 21, 1878, in a paper entitled: "Dose-Dispensing Simplified,"⁴ the simplification was evidently not such that druggists could notice it; for moulded tablets have not become popular among them, perhaps mainly because they require drying. Likewise are compressed tablets, which were introduced even earlier by Professor Brockeden of England in 1844, considered unsuitable for extemporaneous preparation, as granulation of the powder by moistening is believed to be necessary; and this, of course, also requires drying.

A step in the direction of rendering tablet making available for extemporaneous preparation was made in 1909 by A. Schleimer⁵ by advocating the use of cacao butter in lieu of granulation of the powder and subsequent drying. This brings tablets into

the category of extemporaneous preparations. All that is necessary is to add three percent of cacao butter to the powder, and it is ready for immediate compression in a tablet machine. Having found that cacao butter is liable to become rancid on keeping of some tablets made with it, the author experimented to find a substitute devoid of this tendency, and found it in paraffin of low melting point.⁶ For tablets that are not to be kept for any length of time, cacao butter is preferable, as it melts readily and is digestible. The amount of paraffin, however, that enters into the composition of each tablet is so small that in spite of its indigestibility, it seems that it could not meet with any but theoretic objection. Either of these materials, in form of fine shavings, is added to the extent of three to five per cent. with just sufficient trituration to distribute fairly well. Excessive trituration lessens the efficiency of the lubricating agent. If the tablet has a tendency to stick to the punches, the material can be worked better if a little talcum, say three per cent. is added to the powder by stirring it in with a spatula rather than by trituration. This process renders tablet making no more difficult or time-consuming than the making of pills or capsules.

The author has succeeded in still further simplifying the process by the preparation of what he would propose to call "fat sugar." Having noticed that the addition of, say, 10 per cent. of powdered cacao to sugar forms an almost ideal powder for

immediate compression in the tablet machine, the idea occurred to him to reproduce, as nearly as possible, the physical condition of cacao by covering each particle of powdered starch with a thin layer of fat, which can readily be done by triturating starch with liquid petrolatum. While other fat, such as cacao butter, "Crisco" or paraffin, might be used for this purpose, by dissolving the fat in ether and thus distributing it over the starch, permitting the ether subsequently to evaporate, the author has found that liquid petrolatum, 1 part, distributed over 3 parts of starch forms a powder which added to sugar in proportion of about twenty per cent. renders it admirably suitable for compression in a tablet machine. The starch might be sweetened by previously triturating it with an alcoholic solution of saccharin and permitting the alcohol to evaporate; though this sweetening is not essential. For starch, thus prepared, the author proposes the name "fat starch", the formula for which will be found in Chapter VIII. Sugars containing twenty per cent. of "fat starch", are ready for immediate compression in the tablet machine; and admit of admixture of a moderate amount of medicament without losing this quality. If a large amount of medicament is to be incorporated, then an additional amount of "fat starch" should be allowed. Sugars containing "fat starch" the author has called "fat sugars" for want of a better name. He is aware of the fact that petrolatum is not a fat in the true sense of the word. Never-

theless it is, no doubt, its "fatty" nature that does the work; other fatty substances, such as cacao butter or "Crisco", producing the same result as far as rendering the powder suitable for compression in the tablet machine is concerned. Liquid petrolatum has the advantage over these of being devoid of tendency to rancidity.

Excessive trituration interferes with the efficiency of the fat starch, evidently by distributing the fat all over the powder, rendering it homogeneous, which is inimical to tablet making. Therefore in case of the red fat sugar which is used as a vehicle for poisonous medicaments that require very thorough trituration, it is recommended that the fat starch be added after the trituration.

The author would suggest that the pharmacist prepare the various fat sugars described in Chapter VIII and that he keep them on hand, in a cool and *dark* place, adding the medicament as prescribed by the physician, making use of Chapter VII for guidance in the elaboration of individual formulae.

CHAPTER V.

THE TABLET MACHINE.

THE GROUNDLESSNESS of the second objection to tablet making by retail druggists, namely, the necessity of possessing expensive machinery, can perhaps best be shown by the illustrations here given. The simplest and yet practical form of tablet machine known to the author is the "No. 25" machine of Whitall-Tatum Company of Philadelphia (Fig. 1). The price of this machine is about ten dollars.

Its chief disadvantage is that it works rather slowly, as the powder must be put into the die by hand with a small tool furnished with the machine. An automatically feeding machine of reasonable price is the "Eureka" Hand Tablet Machine, furnished by the F. J. Stokes Co., of Philadelphia (Fig. 2). This machine may also be obtained for motor power.

Detailed directions for the putting up and the use of these machines seem unnecessary here as they accompany the machine when sent out by the manufacturer. A few points on the care of the tablet machine may, however, be brought out in order to save the novice trouble and mishaps.

All compressing machines for tablet making consist essentially of a die and two punches, an upper and a lower. It is important that these be kept scrupulously clean and free from rust, nicks and scratches; for unless these parts be perfectly smooth

it is impossible to get them to work properly. When not in use, they should be kept completely covered with vaselin or else immersed in liquid petrolatum, in order to protect them against rust. When re-

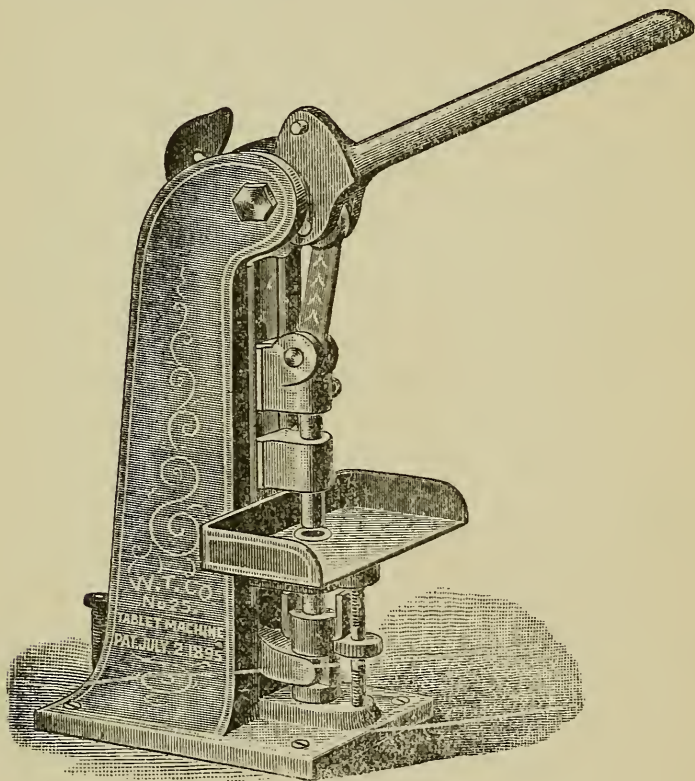


Fig. 1

A simple yet practical form of tablet machine.

quired for use, the grease is removed from them as completely as possible by means of a soft cloth.

In putting the die and punches into the machine, it is best to put in the lower punch first, making sure that it has been pushed completely down into

its socket. Then put in the die, so that the top of the die be exactly flush all around with the table of the machine. See to it that the face of the lower punch be exactly flush with the top of the die when the punch is at its highest point. Then insert the upper punch in its socket; and let it enter the die before locking it in place, so as to insure perfect alignment.

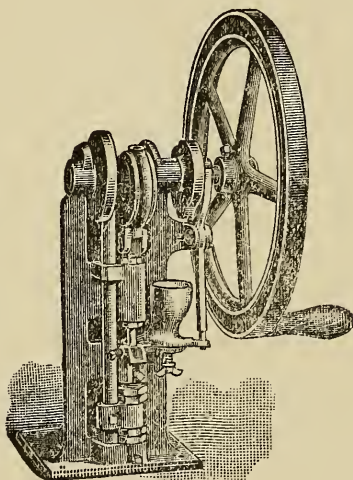


Fig. 2.

The Eureka Hand Tablet Machine. An automatically feeding machine of reasonable price.

When die and punches are to be removed, take out the upper punch first, then the lower punch and die, which may come out suddenly and be injured by knocking against the upper punch if the latter be still in place.

When particles of the powder stick to the die or punches, they should not be scraped off with a hard instrument, as this is liable to scratch, but

should be wiped off with a soft, slightly moistened cloth. To prevent sticking, a little talcum may be used, sprinkled over the powder and lightly mixed by stirring with a spatula.

When the upper face of the tablet splits off, we speak of "capping." To overcome this, ten per cent. of fat starch may be added to the powder. Should "capping" still occur, the amount of fat starch might be increased. "Capping" may also be due to the use of excessive pressure. It may furthermore be due to die or punches being worn or damaged. When this has occurred, the best thing to do is to get a new set of punches, or to have the damaged one refinished by an expert mechanic, preferably the makers of the tablet machine.

It would lead us beyond the scope of this work to give detailed directions for making 'ablets of all kinds. A pharmacist who has equipped himself with a tablet machine and has developed the ambition to make a general line of tablets⁷ may be referred to Mr. Joseph R. Wood's book⁸ on this subject.

CHAPTER VI.

THE CONSTRUCTION OF FORMULAE FOR SWEET TABLETS.

Choice of Flavor.

THERE are quite a number of medicines sufficiently free from taste and odor to be made perfectly pleasant by the mere admixture of sugar and of flavoring. These can, of course, be prepared with any flavor desired. In the formulary, rose has been chosen as the flavor under these circumstances, but any other flavor may be used instead.

Substances that have a slightly acrid taste are generally best disguised by peppermint. For sour taste, lemon is best. Wintergreen was chosen as the flavor for salicylates.

Substances that have a slightly bitter taste are best disguised by "vanilla cacao sugar." For drugs that, in addition to a slightly bitter taste, have an odor that needs disguising, "cinnamon cacao sugar" is to be preferred.

The Subduing of Tastes.

There are quite a number of drugs that have a tendency to leave a rather persistent disagreeable after-taste, drugs of slight solubility, particles of which remain on the tongue longer than the sugar does, so that their taste lingers after the taste of the sugar has disappeared. For such drugs sac-

charinization solves the problem of candy medication. The saccharin will be most efficient, as the author has shown by repeated experiments, if it is directly incorporated with the drug in solution rather than in dry form. Saccharinization is, therefore, carried out in the formulary by triturating the drug with a saturated (3 per cent.) alcoholic solution of saccharin, and permitting the alcohol to evaporate subsequently. The drying may be expedited by using a hot mortar. When alcohol is not permissible, as in the case of "Alcresta" preparations (see below), dry saccharinization must be used instead, that is, triturating the drug with saccharin, preferably a 1 to 10 trituration. Likewise when time does not permit moist saccharinization, triturating the substance with a somewhat larger amount of saccharin will answer the purpose.

A second expedient for the subduing of taste is fat covering, which consists of triturating the drug with liquid petrolatum or other fat, e. g., Crisco in ether, and permitting the ether to evaporate. The thin film of fat left on the drug delays its solution to a slight degree, yet sufficiently to reduce the taste, so that certain drugs—such as aspirin, digitalis, diuretin—can be administered in the form of sweet tablets in useful dose. In these cases, saccharinization and fat covering combined give the best results.

Most of the alkaloids can be administered in candy form by saccharinization with or without additional fat covering, and, in the case of some, the

addition of sodium bicarbonate is still further useful in lessening the solubility, thereby subduing the taste. Only in the case of the bitterest alkaloids such as strychnine and of alkaloids that have to be given in large doses such as quinine are different expedients necessary. For quinine, aristochin or saloquinine solve the problem. For strychnine, Lloyd's "Alcresta" strychnine gives good results. In 1910, John Uri Lloyd⁹ of Cincinnati discovered that the addition of fuller's earth to alkaloids almost completely abolished their bitter taste. He found on further research that this activity resided in the finest particles, especially those of colloidal dimensions, which could be separated from the coarser portion of fuller's earth by elutriation. By means of this powder, now known as Lloyd's Reagent, it is possible to obtain the bitterest alkaloids, even strychnine, in almost tasteless form. That this strychnine combination is still active, can be proved by the fact that it will kill a dog almost as readily as the uncombined strychnine. Lloyd has coined the name "Alcresta" for these alkaloidal combinations; they are marketed by Ely Lilly and Company. The combination of the strychnine with fuller's earth is destroyed by alkali and by alcohol. Hence alcohol must not be added to the powder after the Alcresta combination has been incorporated. The addition of a little acid lessens the bitterness of the combination by lessening solubility in the mouth. The addition of acid is also of advantage to lessen the solubility in the saliva,

and with it the taste, of such resinous bodies as the resin of podophyllum.

Choice of Color.

To indicate tablets containing poisonous substances, a dark red color is chosen, unless cacao disguises the taste better. It would be advisable not to prescribe more than a small number of such tablets to be dispensed at one time, so as to prevent the possibility of poisoning. The choice of the other colors has been more or less without special principle underlying it, yellow having been chosen for lemon, and green for wintergreen, leaving pink for rose and white for peppermint. The relation of color to flavor can, of course, be varied.

CHAPTER VII.

FORMULAE FOR THE PREPARATION OF SWEET TABLETS

The subjoined formulae are published to serve for guidance in the preparation of sweet tablets and as a basis for further study and improvement.

The doses given are children's doses, none of them exceeding a dose safe for a child three years of age. Most of the tablets carry as large a dose as can well be given in this way; which in some cases, though not in many, is not sufficient for a three-year-old child. Where a larger dose can easily be disguised in the same manner, this fact is noted in connection with the formulae.

A warning may not be amiss, in this connection, not to put up in this form anything that does not result in a faultlessly pleasant, actually delicious candy. For confidence once lost is not easily restored.

 Formulae for the preparation of the stock sugars referred to in this formulary will be found in Chapter VIII. They can all be prepared extemporaneously. The drying necessary after the addition of coloring may be expedited by the use of a warm mortar. Nevertheless, alternate formulae have been inserted in most instances to facilitate rapid extemporaneous compounding, in case the stock sugar be not at hand.

While most of these tablets keep well, a few deteriorate. In any case, the freshly prepared tablet

will be found more pleasant than one that has become stale by being kept in stock.

Should difficulty be experienced in the compression of some of these tablets, the addition of a little shaved paraffin by gentle trituration in a mortar; or the stirring in of a little talcum powder with a spatula; or both measures combined will probably overcome the trouble. Some powders work best with light pressure; others require rather heavy pressure.

1. TABELLAE ACETPHENETIDINI DULCES.

Sweet Tablets of Acetphenetidin.

0.06 Gm. (gr. 1).

Caution:—Only a moderate number should be ordered at one time.

Acetphenetidin.....	6.00 Gm.
Alcoholic solution of saccharin, 3%.	2.00 Cc.
Vanilla cacao sugar.....	24.00 Gm.

Mix the acetphenetidin with the alcoholic solution of saccharin (in a hot mortar if in a hurry) and permit the alcohol to evaporate; then mix with the vanilla cacao sugar by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Acetphenetidin.....	6.00 Gm.
Saccharin.....	0.06 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	21.00 Gm.

Mix the saccharin with the tincture of vanilla, then add the acetphenetidin and permit the alcohol to evaporate. Finally add the other ingredients, triturating until they are thoroughly mixed. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

2. TABELLAE ACETYLAMIDOSALOLI DULCES.

Sweet Tablets of Acetylamidosalol (Salophen).

0.06 Gm. (gr. 1).

Acetylamidosalol.....	6.00 Gm.
Green fat sugar.....	24.00 Gm.

Mix by thorough trituration in a mortar, and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Acetylamidosalol.....	6.00 Gm.
Spirit of gaultheria.....	1.00 Cc.
Malachite green solution, 1:1000....	1.00 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the acetylamidosalol and the sugar with the coloring and the flavor by thorough trituration; add the fat starch by gentle trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.3 Gm. tablets.

3. TABELLAE ACIDI ACETYLSALICYLICI DULCES.

Sweet Tablets of Acetylsalicylic Acid (Aspirin).

0.015 Gm. (gr. 1/4.)

Acetylsalicylic acid.....	1.50 Gm.
Alcoholic solution of saccharin, 3%.	1.50 Cc.
Liquid petrolatum.....	0.50 Cc.
Yellow fat sugar.....	28.00 Gm.

Mix the acetylsalicylic acid with the alcoholic solution of saccharin (in a hot mortar if in a hurry), and permit the alcohol to evaporate. Add the liquid petrolatum and triturate. Finally mix with the yellow fat sugar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

4. TABELLAE ACONITINI DULCES.

Sweet Tablets of Aconitine.

0.00003 Gm. (gr. 1/2000).

Caution:—Order only a small number at one time.

Aconitine, crystallized.....	0.003 Gm.
Red fat sugar.....	30.00 Gm.

Mix the aconitine with the red fat sugar by very thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Aconitine, crystallized.....	0.003 Gm.
Carmine.....	0.75 Gm.
Spirit of cinnamon, 10%.....	0.30 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	23.25 Gm.

Triturate the aconitine with the sugar, added in portions, until well mixed. Add the spirit of cinnamon and the carmine and triturate again until the red color is perfectly uniform. Then add the fat starch, triturating gently and for a short time only. Compress in tablet machine, using 3/8-inch die and punches, and make one hundred 0.30 Gm. tablets.

5. TABELLAE ADALINI DULCES.

Sweet Tablets of Adalin.

0.03 Gm. (gr. 1/2).

Caution:—Only a moderate number should be ordered at one time.

Adalin.....	3.00 Gm.
Alcoholic solution of saccharin, 3%..	4.00 Gm.
White sugar fat.....	27.00 Gm.

Mix the alcoholic solution of saccharin with the adalin (in a hot mortar if in a hurry), and permit the alcohol to evaporate. Then mix thoroughly with the white fat sugar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Adalin.....	3.00 Gm.
Saccharin.....	0.12 Gm.
Spirit of peppermint.....	0.50 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	21.00 Gm.

Mix the saccharin with the spirit of peppermint, then add the adalin, and triturate. Then incorporate the sugar by thorough trituration. Finally add the fat starch and triturate gently. Compress in tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

6. TABELLAE ANAESTHESINI DULCES.

Sweet Tablets of Anaesthesine.

0.015 Gm. (gr. 1/4).

Not more than a small number of these tablets should be ordered at one time.

Anaesthesine..... 1.50 Gm.

Pink fat sugar.....28.50 Gm.

Mix the anaesthesine with the pink fat sugar and compress in tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Anaesthesine..... 1.50 Gm.

Spirit of rose, 1%..... 0.60 Cc.

Carmine..... 0.20 Gm.

Fat starch..... 6.00 Gm.

Sugar, powdered.....22.50 Gm.

Triturate the anaesthesine with the sugar and the spirit of rose, add the carmine, and triturate until thoroughly mixed. Finally, add the fat starch with gentle trituration and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

7. TABELLAE ANTIMONII ET POTASSII
TARTRATIS DULCES.**Sweet Tablets of Antimony and Potassium Tartrate
(Tartar Emetic).**

0.0006 Gm. (gr. 1/100).

Caution:—Only a moderate number of these tablets should be ordered at one time, 0.030 Gm. having produced death in children. It would take fifty of these tablets, however, to yield such dose. Larger dose might be administered in this form.

Antimony and potassium tartrate... 0.06 Gm.

Red fat sugar.....18.00 Gm.

Mix by thorough trituration in a mortar and compress in tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Antimony and potassium tartrate... 0.06 Gm.

Carmine..... 0.50 Gm.

Spirit of cinnamon, 10%..... 0.20 Cc.

Fat starch..... 3.60 Gm.

Sugar, powdered.....14.40 Gm.

Having thoroughly triturated the antimony and potassium tartrate with the sugar, add the coloring and the flavoring; and triturate again until the color is perfectly uniform. Then add the fat starch, triturating gently and for a short time only. Compress in a tablet machine using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

8. TABELLAE ANTIPYRINAE DULCES.

Sweet Tablets of Antipyrine.

0.015 Gm. (gr. 1/4).

Caution:—Only a moderate number should be ordered at one time.

Antipyrine.....	1.50 Gm.
Alcoholic solution of saccharin, 3%..	3.00 Cc.
Liquid petrolatum.....	0.50 Cc.
Vanilla cacao sugar.....	28.00 Gm.

Mix the antipyrine with the alcoholic solution of saccharin (in a hot mortar if in a hurry) and permit the alcohol to evaporate. Add the liquid petrolatum and triturate. Then incorporate the vanilla cacao sugar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Antipyrine.....	1.50 Gm.
Saccharin.....	0.09 Gm.
Tincture of vanilla.....	1.50 Cc.
Liquid petrolatum.....	0.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	25.00 Gm.

Mix the tincture of vanilla with the saccharin, add the antipyrine and permit the alcohol to evaporate. Add the liquid petrolatum and triturate. Then incorporate the cacao powder and the sugar by thorough trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

9. TABELLAE APOMORPHINAE DULCES.

Sweet Tablets of Apomorphine.

0.0006 Gm. (gr. 1/100).

Caution:—Only a small number should be ordered at one time; two milligrams of apomorphine having produced alarming collapse in a child.

Apomorphine hydrochloride.....	0.06 Gm.
Vanilla cacao sugar.....	30.00 Gm.

Mix the ingredients by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Apomorphine hydrochloride.....	0.06 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Directions, same as above.

10. TABELLAE ARISTOCHINAE DULCES.

Sweet Tablets of Aristochin.

0.06 Gm. (gr. 1).

Aristochin.....	6.00 Gm.
Alcoholic solution of saccharin, 3%..	3.00 Cc.
Sodium bicarbonate.....	1.00 Gm.
Vanilla cacao sugar.....	23.00 Gm.

Mix the aristochin with the alcoholic solution of saccharin (in a hot mortar if in a hurry) and permit the alcohol to evaporate. Then add the vanilla cacao sugar, and finally the sodium bicarbonate by thorough trituration in a mortar. Compress in a tablet machine, using 3/8-inch die and punches to make one hundred 0.30 Gm. tablets.

Note:—If any difficulty be experienced in compressing this powder into tablets, the addition of a little shaved paraffin will probably overcome the trouble.

Alternate Formula.

Aristochin.....	6.00 Gm.
Saccharin.....	0.09 Gm.
Sodium bicarbonate.....	1.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	20.00 Gm.

Mix the saccharin with the tincture of vanilla, add the aristochin and mix by trituration. Incorporate the cacao powder, the sugar, and finally the sodium bicarbonate. Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—See above note.

11. TABELLAE ARSENI TRIOXIDI DULCES.

Sweet Tablets of Arsenic Trioxide.

0.0006 Gm. (gr. 1/100).

Caution:—Owing to the toxicity of arsenic trioxide not more than a small number should be ordered at one time. Larger doses could be administered in this form.

Arsenic trioxide.....	0.06 Gm.
Red fat sugar.....	18.00 Gm.

Mix the arsenic trioxide with the red fat sugar by thorough trituration in a mortar and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Arsenic trioxide.....	0.06 Gm.
Carminc.....	0.50 Gm.
Spirit of cinnamon, 10%.....	0.20 Cc.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	14.40 Gm.

Having triturated the arsenic trioxide with the sugar, add the carmine and the spirit of cinnamon, and triturate again until the color is perfectly uniform. Then add the fat starch, triturating gently and for a short time only. Compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

12. TABELLAE ATROPINAE DULCES.

Sweet Tablets of Atropine.

0.0003 Gm. (gr. 1/200).

Caution:—Only a small number should be ordered at one time.

Atropine sulphate.....	0.03 Gm.
Vanilla cacao sugar.....	30.00 Gm.

Mix the atropine sulphate with the vanilla cacao sugar by thorough trituration in a mortar; then compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Atropine sulphate.....	0.03 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Triturate the atropine sulphate with the sugar until thoroughly mixed; then add the cacao powder and the tincture of vanilla, and triturate again until the color is perfectly uniform. Compress in tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

13. TABELLAE BISMUTHI SUBCARBONATIS DULCES.

Sweet Tablets of Bismuth Subcarbonate.

0.20 Gm. (gr. 3) .

Bismuth subcarbonate.....	20.00 Gm.
Fat starch.....	2.00 Gm.
Pink fat sugar.....	18.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.40 Gm. tablets.

Alternate Formula.

Bismuth subcarbonate.....	20.00 Gm.
Carmine.....	0.20 Gm.
Spirit of rose, 1%.....	0.40 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	14.00 Gm.

Thoroughly mix the bismuth subcarbonate with the sugar, the carmine, and the spirit of rose by trituration in a mortar; add the fat starch by gentle trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.40 Gm. tablets.

14. TABELLAE BISMUTHI SUBNITRATIS DULCES.

Sweet Tablets of Bismuth Subnitrate.

0.20 Gm. (gr. 3).

Bismuth subnitrate.....	20.00 Gm.
Fat starch.....	2.00 Gm.
Pink fat sugar.....	18.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.40 Gm. tablets.

Alternate Formula.

Bismuth subnitrate.....	20.00 Gm.
Carmine.....	0.20 Gm.
Spirit of rose, 1%.....	0.40 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	14.00 Gm.

Thoroughly mix the bismuth subnitrate with the sugar, the carmine, and the spirit of rose by trituration in a mortar; add the fat starch by gentle trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.40 Gm. tablets.

15. TABELLAE CAFFEINAE DULCES.

Sweet Tablets of Caffeine.

0.006 Gm. (gr. 1/10).

Caffeine (alkaloid).....	0.60 Gm.
Alcoholic solution of saccharin, 3%..	4.00 Cc.
Vanilla cacao sugar.....	29.30 Gm.

Mix the alcoholic solution of saccharin with the caffeine (in a hot mortar if in a hurry) and permit the alcohol to evaporate. Then mix with the vanilla cacao sugar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Caffeine (alkaloid).....	0.60 Gm.
Saccharin.....	0.12 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	26.30 Gm.

Mix the saccharin with the tincture of vanilla, then add the caffeine and finally the other ingredients, and triturate until they are thoroughly mixed. Compress in tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

16. TABELLAE CARBONIS LIGNI DULCES.

Sweet Tablets of Charcoal.

0.18 Gm. (gr. 3).

Charcoal, finely powdered.....	18.00 Gm.
Alcoholic solution of saccharin, 3%..	3.00 Cc.
Alcohol.....	15.00 Cc.
Extract of glycyrrhiza, powdered....	3.00 Gm.
Spirit of anise, 10%.....	1.00 Cc.
Spirit of coriander, 10%.....	0.50 Cc.
Cacao butter, in thin shavings.....	1.50 Gm.
Sugar, powdered.....	7.50 Gm.

Mix all the ingredients except the cacao butter by thorough trituration (in a warm mortar if in a hurry), permit the alcohol to evaporate *completely*; then incorporate the cacao butter by gentle trituration for a short time only. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

17. TABELLAE CERII OXALATIS DULCES.

Sweet Tablets of Cerium Oxalate.

0.12 Gm. (gr. 2).

Cerium oxalate.....	12.00 Gm.
Fat starch.....	2.00 Gm.
White fat sugar.....	16.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Cerium oxalate.....	12.00 Gm.
Spirit of peppermint.....	0.04 Cc.
Fat starch.....	5.00 Gm.
Sugar, powdered.....	13.00 Gm.

Mix the cerium oxalate, the powdered sugar, and the spirit of peppermint by thorough trituration in a mortar; add the fat starch by gentle trituration for a short time only; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

18. TABELLAE COCAINAE DULCES.

Sweet Tablets of Cocaine.

0.001 Gm. (gr. 1/60).

Caution:—Only a small number of these tablets should be ordered at one time, as centigram doses have produced lethal results in children

Cocaine hydrochloride.....	0.10 Gm.
Vanilla cacao sugar.....	30.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Cocaine hydrochloride.....	0.10 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Mix the cocaine hydrochloride and sugar by trituration in a mortar; then add the cacao and the tincture of vanilla, and triturate again until the color is perfectly uniform; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

19. TABELLAE CRETAE DULCES.

Sweet Tablets of Chalk.

0.12 Gm. (gr. 2).

Each tablet represents approximately one half teaspoonful of the official chalk mixture.

Prepared chalk.....	12.00 Gm.
Fat starch.....	3.00 Gm.
Red fat sugar.....	10.00 Gm.

Mix by thorough trituration in mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.25 Gm. tablets.

Alternate Formula.

Prepared chalk	12.00 Gm.
Carmine	0.20 Gm.
Spirit of cinnamon, 10%	0.15 Cc.
Fat starch	5.00 Gm.
Sugar, powdered	8.00 Gm.

Mix the chalk, the flavoring, and the coloring with the sugar by thorough trituration in a mortar, until the pink color is perfectly uniform; then add the fat starch by gentle trituration for a short time only; and compress in a tablet machine, using a 3/8-inch die and punches, to make one hundred 0.25 Gm. tablets.

20. TABELLAE DIGITALIS DULCES.**Sweet Tablets of Digitalis.**

0.008 Gm. (gr. 1/8).

Caution:—Owing to the toxicity of the digitalis, it is best not to order more than a limited number of these tablets at one time.

Digitalis powder	0.80 Gm.
Alcoholic solution of saccharin, 3%	3.00 Cc.
Liquid petrolatum	0.30 Cc.
Cinnamon cacao sugar	29.00 Gm.

Mix the powdered digitalis with the alcoholic solution of saccharin (in a warm mortar if in a hurry) and permit the alcohol to evaporate. Then add the liquid petrolatum and triturate. Finally incorporate the cacao sugar by thorough trituration in a mortar. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Digitalis powder	0.80 Gm.
Alcoholic solution of saccharin	3.00 Cc.
Liquid petrolatum	0.30 Cc.
Spirit of cinnamon, 10%	0.15 Cc.
Cacao powder	3.00 Gm.
Sugar, powdered	26.00 Gm.

Prepare the digitalis, as above described. Mix it with the cacao, the sugar, and the spirit of cinnamon by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

21. TABELLAE ELATERINI DULCES.

Sweet Tablets of Elaterin.

0.0006 Gm. (gr. 1/100).

Caution:—Only a small number of these tablets should be ordered at one time.

Elaterin trituration, 10%.....	0.60 Gm.
Red fat sugar.....	18.00 Gm.

Thoroughly triturate the elaterin with the red fat sugar, added in portions, and make one hundred 0.18 Gm. tablets by compressing in a tablet machine, using 5/16-inch die and punches.

Alternate Formula.

Elaterin trituration, 10%.....	0.60 Gm.
Carmine.....	0.50 Gm.
Spirit of cinnamon, 10%.....	0.20 Cc.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	13.30 Gm.

Having thoroughly mixed the elaterin trituration with sugar, add the carmine and the spirit of cinnamon, and triturate again until the color is uniform. Then add the fat starch by gentle trituration; and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

22. TABELLAE EMETINAE DULCES.

Sweet Tablets of Emetine.

0.0012 Gm. (gr. 1/50).

Caution:—Only a moderate number should be ordered at one time.

Emetine.....	0.12 Gm.
Sodium bicarbonate.....	2.00 Gm.
Vanilla cacao sugar.....	28.00 Gm.

Mix the ingredients by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—If the powder does not work well in the machine, a little shaved paraffin added by gentle trituration will overcome the trouble.

Alternate Formula.

Emetine.....	0.12 Gm.
Sodium bicarbonate.....	2.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	25.00 Gm.

Thoroughly triturate the emetine with the sugar and sodium bicarbonate; then add the cacao powder and the tincture of vanilla, and triturate again until the color is perfectly uniform; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—See note under above formula.

23. TABELLAE FERMENTI ACIDI LACTICI DULCES.

Sweet Tablets of Lactic Acid Ferment.

0.06 Gm. (gr. 1).

Lactic acid ferment.....	6.00 Gm.
Yellow fat sugar.....	24.00 Gm.

Triturate gently in a mortar and compress in a tablet machine, using 3/8-inch die and punches, so make one hundred 0.30 Gm. tablets.

Alternate Formula.

Lactic acid ferment.....	6.00 Gm.
Spirit of lemon, 10%.....	1.25 Cc.
Tincture of curcuma.....	2.50 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the sugar with the tincture of curcuma and the spirit of lemon and permit the alcohol to evaporate. Then thoroughly incorporate the lactic acid ferment by gentle trituration in a mortar. Finally add the fat starch by gentle trituration for a short time only; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

24. TABELLAE FERRI CARBONATIS DULCES.

Sweet Tablets of Ferrous Carbonate.0.02 Gm. (gr. $\frac{1}{3}$).

Saccharated ferrous carbonate.....13.50 Gm.

Cinnamon cacao sugar.....16.50 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Saccharated ferrous carbonate.....13.50 Gm.

Spirit of cinnamon, 10%..... 0.10 Cc.

Cacao powder..... 1.50 Gm.

Sugar, powdered.....15.00 Gm.

Mix by thorough trituration; and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

25. TABELLAE FERRI ET ARSENI DULCES.

**Sweet Tablets of Iron (0.02 Gm.), and Arsenic
(0.0006 Gm.).**

Caution:—Only a moderate number of these tablets should be ordered at one time.

Arsenic trioxide..... 0.06 Gm.

Saccharated ferrous carbonate.....13.50 Gm.

Cinnamon cacao sugar.....16.50 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Arsenic trioxide..... 0.06 Gm.

Saccharated ferrous carbonate.....13.50 Gm.

Spirit of cinnamon, 10%..... 0.10 Cc.

Cacao powder..... 1.50 Gm.

Sugar, powdered.....15.00 Gm.

Triturate the arsenic trioxide with the sugar, added in portions, until thoroughly mixed. Then add the other ingredients; triturate again until the color is perfectly uniform; and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

26. TABELLAE FERRI REDUCTI DULCES.

Sweet Tablets of Reduced Iron.

0.06 Gm. (gr. 1).

Reduced Iron.....	6.00 Gm.
Vanilla cacao sugar.....	24.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Reduced iron.....	6.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	2.50 Gm.
Sugar, powdered.....	21.50 Gm.

Directions same as above.

27. TABELLAE FERRI, QUININAE ET STRYCHNINAE DULCES.

Sweet Tablets of Iron, Quinine and Strychnine.

Equivalent to about 1 Cc. of Elixir of Iron, Quinine and Strychnine.

Caution:—Only a moderate number of these tablets should be ordered at one time.

Alcresta strychnine, 5%.....	0.54 Gm.
Lloyd's Reagent.....	1.00 Gm.
Aristochin.....	1.00 Gm.
Saccharated ferrous carbonate.....	3.33 Gm.
Saccharin.....	0.10 Gm.
Cinnamon cacao sugar.....	24.03 Gm.

Mix the ingredients by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Alcresta strychnine, 5%.....	0.54 Gm.
Lloyd's Reagent.....	1.00 Gm.
Aristochin.....	1.00 Gm.
Saccharated ferrous carbonate.....	3.33 Gm.
Saccharin.....	0.10 Gm.
Spirit of cinnamon, 10%.....	0.15 Cc.
Cacao powder.....	2.50 Gm.
Sugar, powdered.....	21.53 Gm.

Mix the spirit of cinnamon with the sugar, and set aside. Mix the other ingredients by thorough trituration in a mortar; and finally incorporate the flavored sugar. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

28. TABELLAE GLYCERYLIS NITRATIS DULCES.

Sweet Tablets of Nitroglycerin.

0.0003 Gm. (gr. 1/200).

Caution:—Only a small number of these tablets should be ordered at one time.

These tablets do not keep well, hence should be freshly prepared when wanted.

Larger doses might be administered in this form.

Spirit of nitroglycerin, 1%	3.00 Cc.
Red fat sugar	18.00 Gm.

Triturate the spirit of nitroglycerin with the red fat sugar and permit the alcohol to evaporate. When thoroughly dry, compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Spirit of nitroglycerin, 1%	3.00 Cc.
Spirit of cinnamon, 10%	0.20 Cc.
Carmine	0.50 Gm.
Fat starch	3.60 Gm.
Sugar, powdered	14.40 Gm.

Triturate the carmine with the spirit of cinnamon and the sugar, until the color is perfectly uniform. Then add the spirit of nitroglycerin, and triturate again thoroughly but gently. Finally incorporate the fat starch by gentle trituration for a short time only; and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

29. TABELLAE HEROINAE DULCES.

Sweet Tablets of Heroine.

0.0006 Gm. (gr. 1/100).

Caution:—Owing to the toxicity of heroine only a small number of these tablets should be ordered at one time.

Heroin hydrochloride.....	0.06 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Sodium bicarbonate.....	1.00 Gm.
Vanilla cacao sugar.....	29.00 Gm.

Mix the heroin hydrochloride with the alcoholic solution of saccharin (in a hot mortar if in a hurry) and permit the alcohol to evaporate; then add the vanilla cacao sugar. Triturate thoroughly; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—If any difficulty is found in the compressing of these tablets, the addition of a small amount of shaved paraffin will overcome it.

Alternate Formula.

Heroin hydrochloride.....	0.06 Gm.
Saccharin.....	0.06 Gm.
Sodium bicarbonate.....	1.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	26.00 Gm.

Mix the saccharin with the tincture of vanilla; then add the heroin hydrochloride. Permit the alcohol to evaporate. Thoroughly triturate with the sugar, added in portions. Finally add the sodium bicarbonate and the cacao powder; and triturate again until the color is uniform. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—See note under above formula.

30. TABELLAE HEXAMETHYLENAMINAE DULCES

Sweet Tablets of Hexamethylenamine (Urotropin).

0.03 Gm. (gr. 1/2).

As much as 0.06 Gm. (gr. 1) may be given in this form.

Hexamethylenamine.....	3.00 Gm.
Vanilla cacao sugar.....	27.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Hexamethylenamine.....	3.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.00 Gm.

Directions, same as above.

**31. TABELLAE HYDRARGYRI CHLORIDI
MITIS DULCES.**

Sweet Tablets of Mild Mercurous Chloride (Calomel).

0.006 Gm. (Gr. 1/10).

Much larger dose could be administered in this form.

Mild mercurous chloride.....	0.60 Gm.
Pink fat sugar.....	17.40 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Mild mercurous chloride.....	0.60 Gm.
Carmine.....	0.10 Gm.
Spirit of rose, 1%.....	0.40 Cc.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	14.40 Gm.

Having thoroughly triturated the mild mercurous chloride with the sugar, add the carmine and the spirit of rose; and triturate again until the pink color is perfectly uniform. Then add the fat starch by triturating gently and for a short time only. Compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

32. TABELLAE HYDRARGYRI CUM CRETA DULCES.

Sweet Tablets of Mercury with Chalk.

0.03 Gm. (gr. 1/2.).

Larger dose could be administered in this form.

Mercury with chalk.....	3.00 Gm.
White fat sugar.....	27.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Mercury with chalk.....	3.00 Gm.
Spirit of peppermint.....	0.60 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	21.00 Gm.

Mix the ingredients, with the exception of the fat starch, by thorough trituration in a mortar; add the latter by gentle trituration for a short time only; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

33. TABELLAE HYDRARGYRI IODIDI FLAVI DULCES.

Sweet Tablets of Yellow Mercurous Iodide.

0.003 Gm. (gr. 1/20).

Larger dose could be administered in this form.

These tablets must be well protected against light, or they will rapidly become dark; when thus protected, they keep fairly well.

Yellow mercurous iodide.....	0.30 Gm.
White fat sugar.....	18.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Yellow mercurous iodide.....	0.30 Gm.
Spirit of peppermint.....	0.40 Cc.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	14.10 Gm.

Having thoroughly triturated the yellow mercurous iodide with the sugar, add the spirit of peppermint and triturate again. Then add the fat starch, triturating gently and for a short time only. Compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

34. TABELLAE HYDRARGYRI IODIDI RUBRI DULCES.

Sweet Tablets of Red Mercuric Iodide.

0.001 Gm. (gr. 1/60).

Caution:—Only a moderate number of these tablets should be ordered at one time.

Larger dose of red mercuric iodide could be administered in this form.

Red mercuric iodide.....	0.10 Gm.
Red fat sugar.....	18.00 Gm.

Thoroughly mix the red mercuric iodide with the red fat sugar by trituration in a mortar; and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Red mercuric iodide.....	0.10 Gm.
Spirit of cinnamon, 10%.....	0.20 Cc.
Carmine.....	0.50 Gm.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	13.80 Gm.

Having thoroughly triturated the red mercuric iodide with the sugar, add the carmine and the spirit of cinnamon and triturate again. Then add the fat starch, triturating gently and for a short time only. Compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

35. TABELLAE HYOSCINAE DULCES.

Sweet Tablets of Hyoscine.

0.00006 Gm. (gr. 1/1000).

Much larger dose could be administered in this form, *e. g.*, 0.0006 Gm. (gr. 1/100) per tablet.

Caution:—Only a small number of these tablets should be ordered at one time.

Hyoscine hydrobromide.....	0.006 Gr.
Red fat sugar.....	18.00 Gm.

Triturate the hyoscine hydrobromide with red fat sugar, added in portions, and compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

Alternate Formula.

Hyoscine hydrobromide.....	0.006 Gm.
Carmine.....	0.50 Gm.
Spirit of cinnamon, 10%.....	0.20 Cc.
Fat starch.....	3.60 Gm.
Sugar, powdered.....	14.00 Gm.

Having thoroughly triturated the hyoscine hydrobromide with the sugar, add spirit of cinnamon and the carmine, and triturate again until the color is perfectly uniform. Then add the fat starch, triturating gently and for a short time only. Compress in a tablet machine, using 5/16-inch die and punches, to make one hundred 0.18 Gm. tablets.

36. TABELLAE IPECACUANHAE ET OPII DULCES.**Sweet Tablets of Ipecac and Opium (Dover's Powder).**

0.03 Gm. (gr. 1/2).

Caution:—Owing to the toxicity of opium, only a small number should be ordered at one time.

Powdered ipecac.....	0.30 Gm.
Deodorized opium.....	0.30 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Sodium bicarbonate.....	2.00 Gm.
Cinnamon cacao sugar.....	27.40 Gm.

Mix the ipecac with the opium and the alcoholic solution of saccharin (in a warm mortar if in a hurry) and permit the alcohol to evaporate; then add the other ingredients, triturate thoroughly; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—If any difficulty is experienced in the compression of these tablets, the addition of a little shaved paraffin will probably remedy it.

Alternate Formula.

Powdered ipecac.....	0.30 Gm.
Deodorized opium.....	0.30 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Spirit of cinnamon.....	0.15 Cc.
Sodium bicarbonate.....	2.00 Gm.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.40 Gm.

Directions, same as above.

37. TABELLAE MAGNESII OXIDI DULCES.

Sweet Tablets of Magnesia.

0.06 Gm. (gr. 1).

The dose may seem small; it represents, however, $\frac{1}{3}$ teaspoonful of Magnesia Magma (Milk of Magnesia) N. F.

Heavy Magnesium oxide.....	6.00 Gm.
Saccharin.....	0.03 Gm.
Spirit of peppermint.....	0.60 Cc.
Fat starch.....	5.00 Gm.
Sugar, powdered.....	14.00 Gm.

Mix the saccharin with the spirit of peppermint, add the magnesia, and mix by thorough trituration in a mortar. Then incorporate the sugar by thorough trituration, and fat starch by gentle trituration for a short time only. Compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.25 Gm. tablets.

38. TABELLAE MAGNESII SALICYLATIS DULCES.

Sweet Tablets of Magnesium Salicylate.0.03 Gm. (gr. $\frac{1}{2}$).

Magnesium salicylate.....	3.00 Gm.
Green fat sugar.....	27.00 Gm.

Mix by thorough trituration in a mortar, and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Magnesium salicylate.....	3.00 Gm.
Spirit of gaultheria, 10%.....	1.20 Cc.
Solution of malachite green, 1:1000..	1.20 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	21.00 Gm.

Mix the ingredients, excepting the fat starch, by thorough trituration in a mortar; incorporate the fat starch by gentle trituration for a short time only; and compress in a tablet machine, using $\frac{3}{8}$ -inch die and punches, to make one hundred 0.30 Gm. tablets.

39. TABELLAE MORPHINAE DULCES.

Sweet Tablets of Morphine.

0.0006 Gm. (gr. 1/100).

Caution:—Owing to the toxicity of morphine only a few of these tablets should be ordered at one time, perhaps not more than three, as a few milligrams are liable to constitute a lethal dose.

Morphine (alkaloid).....	0.06 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Sodium bicarbonate.....	1.00 Gm.
Vanilla cacao sugar.....	29.00 Gm.

Mix the morphine with the alcoholic solution of saccharin (in a hot mortar if in a hurry), and permit the alcohol to evaporate; then add the sodium bicarbonate and the vanilla cacao sugar, triturating thoroughly; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—If any difficulty is experienced in the compression of these tablets, the addition of a little shaved paraffin will probably remedy it.

Alternate Formula.

Morphine (alkaloid).....	0.06 $\frac{1}{2}$ Gm.
Saccharin.....	0.06 Gm.
Tincture of vanilla.....	1.50 $\frac{1}{2}$ Cc.
Sodium bicarbonate.....	1.00 $\frac{1}{2}$ Gm.
Cacao powder.....	3.00 $\frac{1}{2}$ Gm.
Sugar, powdered.....	26.00 $\frac{1}{2}$ Gm.

Mix the saccharin with the tincture of vanilla, add the morphine, and allow the alcohol to evaporate. Then incorporate the other ingredients by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Note:—See note under above formula.

40. TABELLAE PHENOLPHTHALEINI DULCES.

Sweet Tablets of Phenolphthalein.

0.06 Gm. (gr. 1).

Phenolphthalein.....	6.00 Gm.
Alcoholic solution of saccharin, 3%..	4.00 Cc.
Vanilla cacao sugar.....	24.00 Gm.

Mix the phenolphthalein with the alcoholic solution of saccharin (in a hot mortar if in a hurry), and permit the alcohol to evaporate. Then add the vanilla cacao sugar. Mix thoroughly and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Phenolphthalein.....	6.00 Gm.
Saccharin.....	0.12 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	21.00 Gm.

Mix the saccharin with the tincture of vanilla, and incorporate the phenolphthalein. Finally add the sugar and the cacao by thorough trituration in a mortar. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

41. TABELLAE PILOCARPINAE DULCES.

Sweet Tablets of Pilocarpine.

0.0012 Gm. (gr. 1/50).

Caution:—Only a moderate number of these tablets should be ordered at one time.

Pilocarpine hydrochloride.....	0.12 Gm.
Vanilla cacao sugar.....	30.00 Gm.

Mix by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Pilocarpine hydrochloride.....	0.12 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Mix the pilocarpine hydrochloride with the sugar by thorough trituration in a mortar, add the cacao powder and triturate again until the color is perfectly uniform. Finally incorporate the tincture of vanilla and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

42. TABELLAE RESINAE JALAPAE DULCES.

Sweet Tablets of Resin of Jalap.

0.03 Gm. (gr. 1/2).

Caution:—Only a small number of these tablets should be ordered at one time.

Resin of jalap.....	3.00 Gm.
Cinnamon cacao sugar.....	27.00 Gm.

Mix by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Resin of jalap.....	3.00 Gm.
Spirit of cinnamon, 10%.....	0.20 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.00 Gm.

Mix the resin of jalap, the cacao, and the sugar by thorough trituration in a mortar; finally incorporate the spirit of cinnamon; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

43. TABELLAE RESINAE PODOPHYLLI DULCES

Sweet Tablets of Resin of Podophyllum.

0.001 Gm. (gr. 1/60).

Caution:—Only a small number of these tablets should be ordered at one time.

Citric acid.....	0.05 Gm.
Resin of podophyllum.....	0.10 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Cinnamon cacao sugar.....	30.00 Gm.

Mix the resin of podophyllum and the citric acid with the alcoholic solution of saccharin and permit the alcohol to evaporate. Add the cinnamon cacao sugar; triturate thoroughly; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Citric acid.....	0.05 Gm.
Resin of podophyllum.....	0.10 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Spirit of cinnamon, 10%.....	0.20 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Directions, same as above.

44. TABELLAE SABROMINI DULCES.**Sweet Tablets of Sabromin.**

0.06 Gm. (gr. 1).

Sabromin.....	6.00 Gm.
Pink fat sugar.....	24.00 Gm.

Mix the sabromin with the pink fat sugar by thorough trituration in a mortar. Compress in a tablet machine, with rather heavy pressure, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Sabromin.....	6.00 Gm.
Spirit of rose, 1%.....	0.60 Cc.
Carmine.....	0.20 Gm.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the Sabromin with the carmine and the sugar, add the spirit of rose, and triturate until thoroughly mixed. Finally incorporate the fat starch; and compress in tablet machine, with rather heavy pressure, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

45. TABELLAE SAJODINI DULCES.**Sweet Tablets of Sajodin.**

0.06 Gm. (gr. 1).

Sajodin.....	6.00 Gm.
Pink fat sugar.....	24.00 Gm.

Mix the sajodin with the pink fat sugar by thorough trituration in a mortar. Compress in a tablet machine, with rather heavy pressure, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Sajodin.....	6.00 Gm.
Spirit of rose, 1%.....	0.60 Cc.
Carmine.....	0.20 Gm.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the sajodin with the carmine and the sugar, add the spirit of rose, and triturate until thoroughly mixed. Finally incorporate the fat starch; and compress in tablet machine, with rather heavy pressure, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

46. TABELLAE SALOQUININAE DULCES.

Sweet Tablets of Saloquinine.

0.06 Gm. (gr. 1).

Saloquinine.....	6.00 Gm.
Green fat sugar.....	24.00 Gm.

Mix the saloquinine with the green fat sugar by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Saloquinine.....	6.00 Gm.
Spirit of gaultheria, 10%.....	1.00 Cc.
Solution of malachite green, 1:1000..	1.00 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the saloquinine and the sugar, the coloring and the flavoring by thorough trituration in a mortar; incorporate the fat starch by gentle trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

47. TABELLAE SANTONINI DULCES

Sweet Tablets of Santonin.

0.03 Gm. (gr. 1/2).

Caution:—Only a small number of these tablets should be ordered at one time, perhaps not more than three, as 0.13 Gm. has caused the death of a child.

Santonin.....	3.00 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Vanilla cacao sugar.....	27.00 Gm.

Mix the alcoholic solution of saccharin with the santonin (in a hot mortar if in a hurry) and permit the alcohol to evaporate. Then mix thoroughly with the vanilla cacao sugar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Santonin.....	3.00 Gm.
Saccharin.....	0.06 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.00 Gm.

Mix the saccharin with the tincture of vanilla, add the santonin, and permit the alcohol to evaporate. Then mix with the sugar and the cacao by thorough trituration in a mortar. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

48. TABELLAE SENNAE DULCES.

Sweet Tablets of Senna.

0.06 Gm. (gr. 1).

Senna, powdered.....	6.00 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Paraffin, in thin shavings.....	1.50 Gm.
Yellow fat sugar.....	22.50 Gm.

Pour the alcoholic solution of saccharin over the senna and permit the alcohol to evaporate completely. (Dry saccharinization, using 0.06 Gm. of saccharin, is slightly less efficient; but may be used for extemporaneous preparations.)

Incorporate the yellow fat sugar by thorough trituration in a mortar; and finally the paraffin by gentle trituration for a short time only. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Senna, powdered.....	6.00 Gm.
Saccharin.....	0.06 Gm.
Spirit of lemon, 10%.....	0.15 Cc.
Tincture of curcuma.....	3.00 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the saccharin with the senna, add the sugar and triturate thoroughly until well mixed. Then add the spirit of lemon and the tincture of curcuma, and permit the alcohol to evaporate and the powder to dry completely. Finally incorporate the fat starch by gentle trituration for a short time only. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

49. TABELLAE SODII BICARBONATIS DULCES.

Sweet Tablets of Sodium Bicarbonate.

0.06 Gm. (gr. 1).

Sodium bicarbonate.....	6.00 Gm.
Spirit of peppermint.....	0.60 Cc.
Fat starch.....	6.00 Gm.
Sugar, powdered.....	18.00 Gm.

Mix the sodium bicarbonate with the sugar and the spirit of peppermint by thorough trituration in a mortar. Then incorporate fat starch by gentle trituration for a short time only; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

50. TABELLAE STROPHANTHINI DULCES.

Sweet Tablets of Strophanthin.

0.00003 Gm. (gr. 1/2000).

Caution:—Only a small number of these tablets should be ordered at one time.

Strophanthin trituration, 10%.....	0.03 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Vanilla cacao sugar.....	30.00 Gm.

Mix the strophanthin trituration with alcoholic solution of saccharin (in a hot mortar if in a hurry); and permit the alcohol to evaporate. Add the vanilla cacao sugar and triturate thoroughly. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Strophanthin trituration, 10%.....	0.03 Gm.
Saccharin.....	0.06 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	27.00 Gm.

Mix the saccharin with the tincture of vanilla, add the strophanthin, and permit the alcohol to evaporate. Mix with the sugar by thorough trituration in a mortar; and incorporate the cacao powder, triturating until thoroughly mixed and the color is uniform. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

51. TABELLAE ALCRESTA STRYCHNINAE DULCES.

Sweet Tablets of Alcresta Strychnine.

0.0003 Gm. (gr. 1/200).

Caution:—Only a small number of these tablets should be ordered at one time, probably not more than ten, as four milligrams have been lethal to a child.

Citric acid.....	0.06 Gm.
Alcresta strychnine, 5%.....	0.60 Gm.
Saccharin.....	0.10 Gm.
Cinnamon cacao sugar.....	29.30 Gm.

Mix the citric acid, alcresta strychnine and saccharin by thorough trituration in a mortar. Add the cinnamon cacao sugar in portions and triturate thoroughly. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Citric acid.....	0.06 Gm.
Alcresta strychnine, 5%.....	0.60 Gm.
Saccharin.....	0.10 Gm.
Spirit of cinnamon, 10%.....	0.15 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	26.30 Gm.

Mix the spirit of cinnamon with the sugar; permit the alcohol to evaporate. In another mortar mix the citric acid, the alcresta strychnine, and the saccharin; add the flavored sugar in portions, and triturate until thoroughly mixed; finally add the cacao powder, and triturate again until the color is uniform. Compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

52. TABELLAE SULPHONMETHANI DULCES.

Sweet Tablets of Sulphonmethane.

0.03 Gm. (gr. 1/2).

Caution:—Only a moderate number of these tablets should be ordered at one time.

Sulphonmethane.....	3.00 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Liquid petrolatum	1.00 Cc.
White fat sugar.....	27.00 Gm.

Mix the sulphonmethane with the alcoholic solution of saccharin (in a hot mortar if in a hurry) and permit the alcohol to evaporate. Add the liquid petrolatum and triturate again. Finally add the white fat sugar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Sulphonmethane.....	3.00 Gm.
Saccharin.....	0.06 Gm.
Liquid petrolatum.....	1.00 Cc.
Spirit of peppermint.....	0.60 Cc.
Fat starch	3.00 Gm.
Sugar, powdered.....	23.00 Gm.

Mix the saccharin with the spirit of peppermint and the sulphonmethane. Allow the alcohol to evaporate. Add the liquid petrolatum and triturate again. Incorporate the sugar by thorough trituration in a mortar; add the fat starch, triturating gently and for a short time only. Compress in a tablet machine, using 3/8-inch die and punches to make one hundred 0.30 Gm. tablets.

53. TABELLAE SULPHURIS DULCES.

Sweet Tablets of Sulphur.

0.06 Gm. (gr. 1).

Precipitated sulphur.....	6.00 Gm.
Cinnamon cacao sugar.....	24.00 Gm.

Mix by thorough trituration in a mortar; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Precipitated sulphur.....	6.00 Gm.
Spirit of cinnamon, 10%.....	0.15 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	21.00 Gm.

Directions, same as above.

54. TABELLAE TANNALBINI DULCES.

Sweet Tablets of Tannalbin.

0.06 Gm. (gr. 1).

Tannalbin.....	6.00 Gm.
Vanilla cacao sugar.....	19.00 Gm.

Mix by thorough trituration in a mortar, and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.25 Gm. tablets.

Alternate Formula.

Tannalbin.....	6.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	2.00 Gm.
Sugar, powdered.....	17.00 Gm.

Directions, same as above.

55. TABELLAE TERPINI HYDRATIS DULCES.

Sweet Tablets of Terpin Hydrate.

0.03 Gm. (gr. 1/2).

Represents half-teaspoonful of the Elixir of Terpin Hydrate, N. F., in a much more pleasant form.

Terpin Hydrate.....	3.00 Gm:
Vanilla Cacao Sugar.....	27.00 Gm:

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Terpin hydrate.....	3.00 Gm.
Tincture of vanilla.....	1.50 Cc.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.00 Gm.

Mix the cacao, the sugar, and the tincture of vanilla, and allow the alcohol to evaporate. Add the terpin hydrate; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

56. TABELLAE TERPINI HYDRATIS CUM HEROINA DULCES.

Sweet Tablets of Terpin Hydrate (0.03 Gm.) with Heroine. 0.0006 Gm. (gr. 1/100).

Represents a half-teaspoonful of the N. F. Elixir with but half the amount of heroine in a much more pleasant form.

Caution:—Only a small number of these tablets should be ordered at one time.

Heroine hydrochloride.....	0.06 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Terpin hydrate.....	3.00 Gm.
Vanilla cacao sugar.....	27.00 Gm.

Mix the heroine hydrochloride with the alcoholic solution of saccharin (in a hot mortar if in a hurry), and permit the alcohol to evaporate. Add the terpin hydrate and the vanilla cacao sugar; triturate thoroughly; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Heroine hydrochloride.....	0.06 Gm.
Saccharin.....	0.06 Gm.
Tincture of vanilla.....	1.50 Cc.
Terpin hydrate.....	3.00 Gm.
Cacao powder.....	3.00 Gm.
Sugar, powdered.....	24.00 Gm.

Mix the heroine hydrochloride with the saccharin and the tincture of vanilla, and allow alcohol to evaporate. Mix with the sugar, added in portions. Finally incorporate the terpin hydrate and the cacao powder by thorough trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

57. TABELLAE THEOBROMINAE SODIO-SALICYLATIS DULCES.

Sweet Tablets of Theobromine Sodio-salicylate (Diuretin).

0.015 Gm. (gr. 1/4).

Theobromine sodio-salicylate.....	1.50 Gm.
Alcoholic solution of saccharin, 3%..	2.00 Cc.
Liquid petrolatum	0.50 Cc.
White fat sugar.....	28.00 Gm.

Mix the diuretin with the alcoholic solution of saccharin (in a hot mortar if in a hurry), and permit the alcohol to evaporate. Add the liquid petrolatum and triturate. Finally incorporate the white fat sugar, and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

Alternate Formula.

Theobromine sodio-salicylate.....	1.50 Gm.
Saccharin.....	0.06 Gm.
Liquid petrolatum	0.50 Cc.
Spirit of peppermint.....	0.60 Cc.
Fat starch	5.00 Gm.
Sugar, powdered.....	23.00 Gm.

Mix the theobromine sodio-salicylate and the saccharin with the spirit of peppermint and permit the alcohol to evaporate. Add the liquid petrolatum and triturate. Finally incorporate the sugar by thorough trituration and the fat starch by gentle trituration; and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.30 Gm. tablets.

58. TABELLAE THYROIDEAE DULCES.

Sweet Tablets of Thyroid.

0.06 Gm. (gr. 1).

Desiccated thyroid gland 6.00 Gm.

Cinnamon cacao sugar 19.00 Gm.

Mix by thorough trituration in a mortar and compress in a tablet machine, using 3/8-inch die and punches, to make one hundred 0.25 Gm. tablets.

Alternate Formula.

Desiccated thyroid gland 6.00 Gm.

Spirit of cinnamon 0.15 Cc.

Cacao powder 2.00 Gm.

Sugar, powdered 17.00 Gm.

Directions, same as above.

CHAPTER VIII.

FORMULAE FOR STOCK PREPARATIONS.

(Referred to in Chapter VII.)

1. FAT STARCH.

Alcoholic solution of saccharin, 3%, *	15.00 Cc.
Liquid petrolatum, ...	25.00 Cc.
Starch, ...	75.00 Gm.

Mix the starch with the solution of saccharin, and permit the alcohol to evaporate completely. Then incorporate the liquid petrolatum.

2. CINNAMON CACAO SUGAR.

Spirit of cinnamon, 10%	0.50 Cc.
Cacao powder	10.00 Gm.
Dextrose **, ...	10.00 Gm.
Sugar, powdered	80.00 Gm.

Mix thoroughly by trituration in a mortar; and preserve in a well-stoppered bottle.

3. GREEN FAT SUGAR.

Spirit of gaultheria, 10%	4.00 Cc.
Solution of malachite green, 1:1000..	4.00 Cc.
Fat starch	20.00 Gm.
Sugar, powdered	80.00 Gm.

Mix the powdered sugar with the solution of malachite green; permit to dry. Add the fat starch and the spirit of gaultheria, and preserve in a well-stoppered bottle. Keep in a dark place.

4. PINK FAT SUGAR.

Solution of carmine, N. F.	0.50 Cc.
Spirit of rose, 1%	2.00 Cc.
Fat starch	20.00 Gm.
Sugar, powdered	80.00 Gm.

Add the solution of carmine to the sugar and triturate until thoroughly mixed. Then add the fat starch and the spirit of rose, and preserve in a well-stoppered bottle in a dark place.

* Not absolutely necessary.

** Equivalent amount of sugar might be used though powder may not work quite as well in machine.

5. RED FAT SUGAR.

Solution of carmine, N. F.....	6.00 Cc.
Spirit of cinnamon, 10%.....	1.00 Cc.
Fat starch.....	20.00 Gm.
Sugar, powdered.....	80.00 Gm.

Mix the carmine solution with the sugar and permit the powder to dry. Then add the spirit of cinnamon. Owing to the fact that the red fat sugar is used with poisonous substances requiring very thorough trituration which is liable to lessen the efficiency of the fat starch, it is well to add the latter *after* the medicament has been incorporated with the red cinnamon sugar. Preserve in a well-stoppered bottle in a dark place.

6. VANILLA CACAO SUGAR.

Tincture of vanilla.....	5.00 Cc.
Cacao powder.....	10.00 Gm.
Dextrose*.....	10.00 Gm.
Sugar, powdered.....	80.00 Gm.

Mix thoroughly by trituration in a mortar, and preserve in a well-stoppered bottle.

7. WHITE FAT SUGAR.

Spirit of peppermint.....	2.00 Cc.
Fat starch.....	20.00 Gm.
Sugar, powdered.....	80.00 Gm.

To the powdered sugar add the fat starch and the spirit of peppermint. Mix and preserve in a well-stoppered bottle in a dark place.

8. YELLOW FAT SUGAR.

Spirit of lemon, 10%.....	5.00 Cc.
Tincture of curcuma.....	10.00 Cc.
Fat starch.....	20.00 Gm.
Sugar, powdered.....	80.00 Gm.

Mix the powdered sugar with the tincture of curcuma and permit the alcohol to evaporate; then add the spirit of lemon and the fat starch. Mix well and preserve in a well-stoppered bottle in a dark place.

* Equivalent amount of sugar might be used, though powder may not work as well in machine.

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